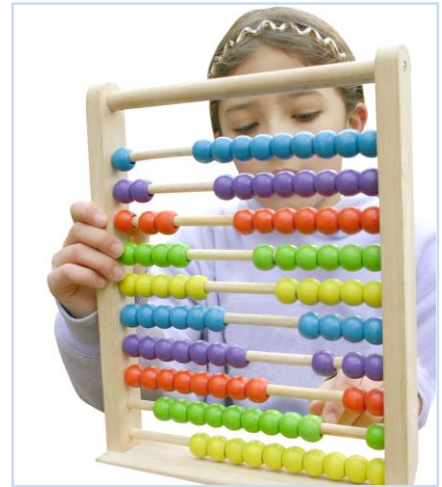


Math: An Annotated Bibliography

A selected listing of titles available on this topic from the
Early Childhood Training Center's Media Center



Early Childhood Training Center

The Early Childhood Training Center is located at
6949 S. 110th Street, Omaha, Nebraska 68128-5722.

To request any of these materials, contact the Media Center by phone at 402-557-6885.

Web Site: <http://www.education.ne.gov/oec/ectc.html>

Online Catalog: <http://ectc-library.education.ne.gov>

Books

Blocks and Beyond: Strengthening Early Math and Science Skills through Spatial Learning. Mary Jo Pollman. (2010). Baltimore: Brookes. Teach spatial skills to young children, and improve their overall academic outcomes. This innovative teaching resource has the research-based insights and practical activities early childhood educators need to promote spatial development throughout the school day.

Building Box Series: Towers. Dimensions Educational Research Foundation. (2006). Lincoln, NE: Author. This *Building Box Series* has been fielded-tested by the Dimensions Educational Research Foundation and provides young children with hands-on experiences with 3-dimensional materials. The series includes inspiring images that will encourage children to build and create. This kit contains a hand crafted set of building blocks, three replicas of famous towers, four large photo-fact cards that tell fun stories about the replica towers, 16 waterproof images cards with activities to spark children's imaginations and strengthen mathematics and literacy, and an idea book that will inspire children to use the look-move-build-sketch model as they explore the items in the kit.

Cowboys Count, Monkeys Measure, and Princesses Problem Solve: Building Early Math Skills Through Storybooks. Jane M. Wilburne. (2011). Baltimore: Brookes. Are you nervous about teaching math to young children? Too pressed for time to teach all of the math concepts children need to know? Now there's a practical guide to one of the most effective ways to enhance children's mathematical thinking in pre-k through primary grades, weaving math concepts into story time.

The Creative Curriculum for Preschool, Volume 4: Mathematics. Diane Trister Dodge. (2010). Washington, DC: Teaching Strategies. This Teaching Strategies volume explains the components and process skills of mathematics and provides teachers with practical strategies for promoting mathematics learning throughout the day.

Get Ready for Math: Making Child Care Work for You. Sally Moomaw. (2006). St. Paul, MN: Redleaf Press. Help parents partner with you in introducing their children to the pleasures of math. In this book, parents will find ways to help you nurture important emerging math skills, from sorting and division of materials to early counting. Basic ideas and tools, including classroom-tested activities, will help support their child's math learning, both at home and in child care.

Growing Minds: Guiding Strong Cognitive Foundations in Early Childhood. Carol Coppel. (2011). Washington, DC: National Association for the Education of Young Children. From the beginning of life, young children's learning and activities depend on their cognitive capabilities and development. To cope with the environment they live in, children need to learn about their physical and social worlds; acquire language; regulate their bodies, emotions, and thoughts; and gain competence in literacy, mathematics, science, and other knowledge domains. This collection of readings from books and *Young Children* articles outlines important dimensions of their early cognitive development and describes approaches for promoting it.

How Students Learn: History, Mathematics, and Science in the Classroom. Suzanne Donovan (Ed.). 2005. Washington, DC: National Academy Press. *How Students Learn* offers a highly useful blend of principle and practice. It will be important not only to teachers, administrators, curriculum designers, and teacher educators, but also to parents and the larger community concerned about children's education.

Increasing the Power of Instruction: Integration of Language, Literacy, and Math across the Preschool Day. Judith A. Schickedanz. (2008). Washington, DC: National Association for the Education of Young Children. This book shows teachers how to maximize the scope and power of their instruction through integration—across content domains and across learning contexts. With a focus on language, literacy, and mathematics, the author introduces strategies that will bolster instruction in all subjects. Engaging vignettes demonstrate effective integration throughout the schedule, including during story time, center time, and large and small group sessions.

Math Activities A to Z. Joanne Matricardi. (2005). Clifton Park, NY: Thomson Delmar Learning. Each section in this book helps teachers and parents find math activities for a theme-based curriculum incorporating a letter of the week. A theme-specific index and math-concept index make it easy to find just the right activities for each lesson.

Math and Science for Young Children, 4th Edition. Rosalind Charlesworth. (2003). Clifton Park, NY: Delmar. This 4th edition focuses on the integration of mathematics and science with other subject areas for children from birth through age eight. Based on established theories of child development and learning, this book is compatible with guidelines and standards of many national professional organizations. Mathematics and science concepts are related to national standards and present a common framework for integration with music and movement, language arts, visual arts, science, and social studies activities. Problem solving is emphasized as the means for constructing concepts using a balance of naturalistic, informal, and structured activities and experiences.

Math at Their Own Pace. Greg Nelson. (2007). St. Paul, MN: Redleaf Press. *Math at Their Own Pace* provides pre-designed, child-centered activities that engage and challenge young children to learn math at their own level. You can place these easy-to-construct, inexpensive activities "on the shelf" for children to use when they are developmentally ready and interested.

Math in Minutes: Easy Activities for Children Ages 4-8. Sharon MacDonald. (2007). Beltsville, MD: Gryphon House. This introduction to early math concepts will be a sure-fire hit with young children. They can go on a geometric shape hunt, measure with pompoms, or find the missing numbers. The chapters are organized by math concept and each activity relates directly to the National Council of Teachers of Mathematics standards.

Mathematics: The Creative Curriculum Approach. Juanita Copley. (2007). Washington, DC: Teaching Strategies. This book expands on the information in *The Creative Curriculum for Preschool*, showing how and why mathematics can and should be part of children's everyday experiences and activities. This

curriculum includes opportunities for children to explore independently and times for directing teaching in small groups, in large groups, and one-on-one.

Preschool Math. Bob Williams. (2005). Beltsville, MD: Gryphon House. *Preschool Math* is organized by curriculum area, making it easy to integrate the activities into daily plans. It encourages teachers to use children's natural curiosity and interests through a variety of activities. Each activity relates to the guidelines set by the National Council of Teachers of Mathematics.

Showcasing Mathematics for the Young Child. Juanita Copley (Ed.). (2004). Reston, VA: National Council of Teachers of Mathematics. The purpose of this book is to illustrate activities that promote early mathematics development for children ages three to five and to showcase mathematics for the young child. The activities in this book are distributed into five content areas: number and operations, geometry, algebra, measurement, and data analysis.

Spotlight on Young Children and Math. Derry Koralek (Ed.). (2004). Washington, DC: National Association for the Education of Young Children. Too often, as early childhood teachers, we give math short shrift. All of the highly readable articles within this book, collected from *Young Children* and other NAEYC resources, reflect the research-based recommendations for practice in NAEYC's joint position statement with the National Council of Teachers of Mathematics. The authors offer proven strategies to introduce key math concepts, foster problem solving and mathematical thinking, and encourage use of math across the curriculum.

Starting with Stories: Engaging Multiple Intelligences through Children's Books. Pam Schiller. (2006). St. Paul, MN: Gryphon House. Featuring 100 well-loved children's books, *Starting with Stories* has more than 1,500 activities to actively engage every learning style. Connect with children's multiple intelligences through over 1,500 math, art, dramatic play, fine motor, writing, block, science, and discovery activities.

Teaching Math to People with Down Syndrome and Other Hands-On Learners, Book 1. DeAnna Horstmeier. (2004). Bethesda, MD: Woodbine House. Teach learners with Down syndrome the math skills that will lead to independent living. This effective, hands-on program helps preschoolers to adults master basic skills such as calculator use, measurements, time, counting, computation, and more.

Teaching Mathematics in Early Childhood. Sally Moomaw. (2011). Baltimore: Brookes. Current and future educators will discover how to teach critical math concepts to preschool and kindergarten students while meeting national standards for mathematics education. This accessible textbook gives readers a solid theoretical understanding of math concepts and standards and the guidance the need to create and implement their own lessons.

The Young Child and Mathematics, second edition. Juanita Copley. (2010). Washington, DC: National Association for the Education of Young Children. This second edition of *The Young Child and Mathematics* reflects recent developments in math education in a wealth of vignettes from classrooms, Descriptions have been provided by the vendors or publishers.

activity ideas, and strategies for teaching young children about math processes and concepts. Using standards and guidelines from the National Council of Teachers of Mathematics (NCTM) and NAEYC, Juanita Copley shows how teachers can readily and enjoyably make mathematics an integral part of their classrooms all day, every day. The book includes a DVD of print and video resources, including clips of the author in action in real classrooms, engaging young children in math thinking and learning.

Independent Study Kits

Early Learning Guidelines, Math Independent Study, Volume 1: Awareness. Early Childhood Training Center. (2007). Omaha, NE: Author. This independent study kit provides the user with 2 hours of independent study credit. It includes a videotape entitled *Cognitive Development*, a bound collection of articles on the topic, and the copy of the corresponding *Early Learning Guidelines* domain.

Early Learning Guidelines, Math Independent Study, Volume 2: Application. Early Childhood Training Center. (2007). Omaha, NE: Author. This independent study kit provides the user with 2 hours of independent study credit. It includes a book entitled *Teaching Numeracy, Language, and Literacy with Blocks*, a bound collection of articles on the topic, and a copy of the corresponding *Early Learning Guidelines* domain.

Early Learning Guidelines, Math Independent Study, Volume 3: Refinement. Early Childhood Training Center. (2007). Omaha, NE: Author. This independent study kit provides the user with 2 hours of independent study credit. It includes a video and DVD version of *Building Structures with Young Children*, a bound collection of articles on the topic, and a copy of the corresponding *Early Learning Guidelines* domain.

DVDs

Better Kid Care: Math for Every Age. If you're able to add $1 + 1$ and get 2, you can do math with children. Learn what young children understand about math at each age and simple math activities to do with infants, toddlers, and preschoolers. Produced and distributed by Better Kid Care at Pennsylvania State University. 75 minutes, 2008.

Journals

The Early Childhood Training Center subscribes to the following journal titles which include information on mathematics for young children.

Early Childhood Today is published eight times per year by Scholastic, Inc. Each issue includes a list of conferences for early childhood professionals and a column of recommended children's books. Other topics include classroom issues, administration, family communication, and child development.

Exceptional Children, published six times per year by the Council for Exceptional Children, contains original research on the education and development of exceptional infants, toddlers, children and youth, and articles on issues of concern to special educators.

Young Children, published six times per year, is the official publication of the National Association for the Education of Young Children. The goal of NAEYC is to offer professional development opportunities to early childhood educators to improve the quality of services to children during the critical years of development from birth through age eight.